

REMARKS

In the Office Action¹, the Examiner:

- (a) rejected claims 1-16 under 35 U.S.C. § 101 as not falling within one of the four statutory categories of invention;
- (b) rejected claim 17 under 35 U.S.C. § 101 as being directed to non-statutory subject matter;
- (c) rejected claims 1-3, 6-10, and 13-17 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Publication No. 2007/0122027 to Kunita et al. ("Kunita"); and
- (d) objected to claims 4, 5, 11, and 12 as being dependent upon a rejected base claim, but indicated that these claims would be allowable if rewritten in independent form.

By this Response, Applicant has amended claims 1, 6, 13, and 17. Claims 1-17 remain pending and under current examination. Applicants thank the Examiner for indicating the allowable subject matter of claims 4, 5, 11, and 12. For the at least following reasons, Applicants respectfully traverse the objection and rejections.

I. 35 U.S.C. § 101 Rejections of Claims 1-17

Applicant respectfully traverses the rejections of claims 1-17 under 35 U.S.C. § 101.

Regarding claims 1-16, the Examiner alleged that "the instant claims neither transform underlying subject matter nor positively tie to another statutory category that

¹ The Office Action may contain statements characterizing the related art, case law, and claims. Regardless of whether any such statements are specifically identified herein, Applicants decline to automatically subscribe to any statements in the Office Action.

accomplishes the claimed method steps, and therefore do not qualify as a statutory process.” (Office Action at p. 2.) Applicant respectfully disagrees. However, in order to advance prosecution, Applicants have amended claim 1 to recite a “computer-implemented method,” wherein each step of the method is performed by “a processing unit of a computer.” Support for the recited “processor” can be found, for example, in page 25, line 32 - page 26, line 5 of the specification. Therefore, amended claim 1 and its dependent claims 2-16 meet the “machine-or-transformation” test set forth by the Federal Circuit in *In re Bilski* for at least the reason that the claims are tied to a machine. *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008) (*en banc*). Accordingly, claims 1-16 fall squarely within a statutory category.

Regarding claim 17, the Examiner alleged that the “computer-executable program” as recited in claim 17 is software per se, and thus, does not fall within a statutory category of invention. (Office Action at p. 3.) Applicant respectfully disagrees. However, solely to advance prosecution, Applicants have amended claim 1 to recite a “computer-readable medium containing instructions which, when executed by a processor, cause a computer to perform a method,” which is clearly statutory under 35 U.S.C. § 101. Therefore, amended claim 17 is directed to statutory subject matter.

Because the amended claims 1-17 recite statutory subject matter, the § 101 rejection should be withdrawn. Accordingly, Applicant requests the Examiner to withdraw this rejection of claims 1-17 under 35 U.S.C. § 101.

II. 35 U.S.C. § 102(e) Rejection of Claims 1-3, 6-10, and 13-17

Applicant respectfully traverses the rejection of claims 1-3, 6-10, and 13-17 under 35 U.S.C. § 102(e) as being anticipated by Kunita. Kunita fails to disclose each and every element of these claims for at least the following reasons.

In order to properly establish anticipation under 35 U.S.C. § 102, the Federal Circuit has held that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Furthermore, “[t]he identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). See also M.P.E.P. § 2131.

Independent claim 1 recites a “computer-implemented method,” including, *inter alia*, “while the shapes and the areas of the individual projection planes which are regions in the projection planes of images acquired from the plurality of viewpoints are kept constant, making a determination, by the processing unit, such that the shapes and the sizes of the individual projection planes are included in the reference projection plane in overlapping regions of the individual projection planes acquired from two viewpoints positioned at the outermost positions of the plurality of viewpoints,” and “cutting out, by the processing unit, regions of the reference projection plane from the

individual projection planes acquired from the respective viewpoints to form a multi-viewpoint image for three-dimensional image display, wherein the cut-out regions are shifted in position in horizontal and vertical directions according to the respective viewpoints.” Kunita fails to disclose at least these elements.

In the Office Action, the Examiner referred to several features of Kunita. For example, the Examiner appears to allege that the “projection planes of the multi-layered structure,” “reference viewpoints,” and “projection points” as disclosed by Kunita, correspond to the claimed “reference projection plane,” “a plurality of viewpoints,” and “target viewpoints,” respectively. (Office Action at p. 4.) Based on these interpretations, the Examiner also appears to allege that Kunita’s determination of the “existence probability” corresponds to the claimed “making determination” step, and that Kunita’s “clipping processing” correspond to the claimed “cutting-out” step. This is not correct.

First, Kunita merely teaches determining an “existence probability” that the “projection points [are] on the line 1p extending from the observer's viewpoint P,” that is, the probability that the “projection points ... overlapping when viewed from the observer's viewpoint P.” (Kunita at para. [0359].) This does not constitute teaching of “making a determination, by the processing unit, such that the shapes and the sizes of the individual projection planes are included in the reference projection plane in overlapping regions of the individual projection planes acquired from two viewpoints positioned at the outermost positions of the plurality of viewpoints,” as recited by claim

1. More specifically, the “projection points ... overlapping when viewed from” a single “observer's viewpoint P” are different from “overlapping regions of the individual projection planes acquired from two viewpoints,” as recited by claim 1.

Moreover, Kunita's “clipping processing” has nothing to do with the claimed “cutting-out” step as recited by claim 1. Kunita uses the “clipping processing” to make “the color information ... fall within the limit of the effective color space.” (Kunita at para. [0439].) During the “clipping processing,” transparency is provided to each projection points, and the mixing processing is performed successively from a projection point of the generated image far from the view point to a projection point near the view point, in which color information obtained by the mixing processing up to a projection point is obtained by performing interior division between color information at the projection point and color information is obtained by the mixing processing up to a previous projection point with a ratio according to the transparency. (See Kunita at paras. [0440] and [0441].) Indeed, the “clipping processing” merely clips the color information of a projection point so that it does not exceed the limit of the color space, but does not spatially cut-out “regions of the reference projection plane from the individual projection planes acquired from the respective viewpoints,” as recited by claim 1. Furthermore, there is no disclosure in Kunita that “the cut-out regions are shifted in position in horizontal and vertical directions according to the respective viewpoints,” as recited by amended claim 1.

For at least these reasons, Kunita does not disclose each and every element of claim 1. Therefore, the rejection of claim 1 under 35 U.S.C. § 102(e) based on Kunita is improper and must be withdrawn. Independent claim 17, while of a different scope from claim 1, includes elements similar to those recited in claim 1. For reasons similar to those set forth above, the rejection of claim 17 under 35 U.S.C. § 102(e) based on Kunita is also improper and must be withdrawn.

Claims 2, 3, 6-10, and 13-16 depend from independent claim 1 and are allowable at least by virtue of their dependence from allowable independent claim 1. Accordingly, the rejection of claims 2, 3, 6-10, and 13-16 under 35 U.S.C. § 102(e) based on Kunita is also improper and must be withdrawn.

III. Objection to Claims 4, 5, 11, and 12

The Examiner indicated that claims 4, 5, 11, and 12 contain allowable subject matter, but objected to the claims solely because they depend on a rejected base claim. (Office Action at p. 5.) As discussed above, independent claim 1 is allowable over Kunita and thus, claims 4, 5, 11, and 12 are also allowable at least by virtue of their dependence from allowable independent claim 1. Accordingly, Applicant requests the Examiner to withdraw the objection to claims 4, 5, 11, and 12 and allow these claims.

IV. Conclusion

In view of the foregoing, Applicant respectfully requests reconsideration and reexamination of this application, and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account 06-0916.

Respectfully submitted,

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By: 

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